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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,372	09/19/2003	Marc Holness	NOR-034 (15632RO)	8497

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EXAMINER	
BLOUNT, STEVEN	

ART UNIT	PAPER NUMBER
2668	

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/666,372	HOLNESS ET AL.	
	Examiner	Art Unit	
	Steven Blount	2668	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/23/05 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 3, 5, 8, 10 – 11, 13 – 20 are rejected under 35 U.S.C. 103(a) as being obvious over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to Ballintine et al and U.S. patent 6,366,563 to Weldon et al.

With regard to claim 1, AAPA discusses transporting SONET data on page 1 of the specification. AAPA discusses the problem existing in the prior art wherein "a service can traverse the networks of multiple carriers. However, OAM information typically does not transmit across handoff points between network carriers....Another

consequence of lack of control points is the inability of service providers to isolate and segment faults adequately for commissioning and reliability purposes" (pages 2 – 3). AAPA does not however teach isolating the faults by sending performance messages across the different networks and assessing and comparing the performance based on the messages of both of the termination points.

Ballintine et al teach the solution to transmitting the said OAM (operations, administration, and management) data between different networks (see members 100 and 208 in figure 2 and note the discussion above) wherein service performance report messages having information *related to a performance of the service* as determined by the service termination point are transmitted over the service management channel OSC as noted above. Ballintine et al also teach sending a "forward defect indicator message" to inform a downstream channel where an optical channel is defective. See col 2, lines 56+. The examiner notes that it is well known to "isolate and segment faults" in areas where there is a high number of bad connections, *including overly delayed packets*, in a network and that this type of data (ie, number of dropped packets) is the type of information which would be commonly carried in the performance messages discussed above between the service endpoints. AAPA/Ballintine et al do not however teach specifying the type of service in the service performance report messages.

Weldon et al teach a system similar to Ballintine et al which operates over an optical communications system wherein service report messages are used to verify SLA's, wherein these SLA compliance statistic messages (see col 7 lines 1+) are sent from a Probe Poller Processor as described in col 8, and wherein in these messages

are identified according to the type of service they pertain to. See col 8, line 25, where the file name "latency log" is applied to a service message which pertains to network latency.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have sent service information (such as the number of bad connections) across the disparate (multiple carrier) optical networks of AAPA and compared the results, in light of the teachings of Ballintine et al, in order to provide a useful means for isolating faults in an optical network. It would have been further obvious to one of ordinary skill in the art at the time of the invention to have identified the type of service for which the SLA is applied to in AAPA/Ballintine, in light of the teachings of Weldon et al in order to allow the system to be able to process the information more efficiently in view of the fact that knowing the service would allow the system to channel the computational resources towards processing this information.

With regard to claim 2 and 5, note that monitoring can occur at member 203 in figure 2.

With regard to claim 3, see the discussion of SLA in AAPA, page 1, paragraph 003.

With regard to claim 8, it would be obvious to transfer a command when repositioning the network as a result of the determination of a fault as mentioned above.

With regard to claim 10, see the rejection of claim 1 above and note that all the apparatus limitations are discussed therein.

With regard to claim 11, the information is transmitted as overhead information (see col 3 lines 2+) and note that a byte of the information would be an obvious denomination for such information to be carried in.

With regard to claim 13, see the discussion above relating to the use of service messages.

With regard to claims 14 - 15, see the discussion above and note that members 107 and 204 are commonly known to be edge service /core service switches in this type of arrangement.

With regard to claim 16, Sonet is a synchronous service.

With regard to claim 17, see the discussion of different service providers in AAPA.

With regard to claim 18, see points 102 and 102 in figure 2, both on the same network.

With regard to claim 19, see the above rejections, including clients 101 and 215 in figure 2.

With regard to claim 20, see the rejection of claim 10 above and note the action of OEPU 107 in col 3 line 52.

3. Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to Ballintine et al and U.S. patent 6,366,563 to Weldon et al as applied above, and further in view of U.S. patent 5,768,255 to Brownmiller et al.

With regard to claim 4, AAPA/Ballintine et al/Weldon et al teach the invention as discussed above, but do not teach generating the PRM as a scheduled event. Brownmiller et al teach performance monitoring of ends of a network as described in the abstract, and also teach generating messages based on this monitoring as a scheduled event. See col 8 lines 45+. It would have been obvious to one of ordinary skill in the art at the time of the invention to have generated the messages in AAPA/Ballintine et al/Weldon et al at regular, scheduled times in light of the teachings of Brownmiller in order to ensure that the system information is made available on a regular basis such that performance can be improved.

With regard to claim 6, see col 9 line 45 (service query).

With regard to claim 7, configuration is mentioned in col 10 lines 1+.

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to Ballintine et al and U.S. patent 6,366,563to Weldon et al as applied to claim 8 above, and further in view of U.S. patent 6,731,648 to Cotter.

AAPA/Ballintine et al/Weldon et al teach the invention as described above, but do not teach the use of a loopback condition. This is taught in Cotter. See the abstract. Note also the use of a "further acknowledgement signal" in col 6 lines 24+. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used a loopback condition in AAPA/Ballintine et al/Weldon et al in light of the teachings of Cotter in order to provide a means for testing connectivity.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being obvious over the Applicants Admitted Prior Art (AAPA) in view of U.S. patent 6,594,047 to Ballintine et al and U.S. patent 6,366,563to Weldon et al as applied to claim 8 above, and further in view of U.S. patent5,768,530 to Galway et al.

AAPA/Ballintine et al/Weldon et al teach the invention as described with respect to claim 10 above, but do not teach the use of a generic framing procedure client management frame. The use of a similar frame in a Sonet environment is taught in Galway et al. See col 9, lines 44+.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided AAPA/Ballintine et al/Weldon et al with a generic framing procedure client management frame in light of the teachings of Galway et al in order to provide a generic means for transferring the information.

6. Applicants remarks are moot in view of the new grounds of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Blount whose telephone number is 703-305-0319. The examiner can normally be reached on M-F 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To, who can be reached at 571 – 272 - 7629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB

3/10/2006

ALPUS H. HSU
PRIMARY EXAMINER